

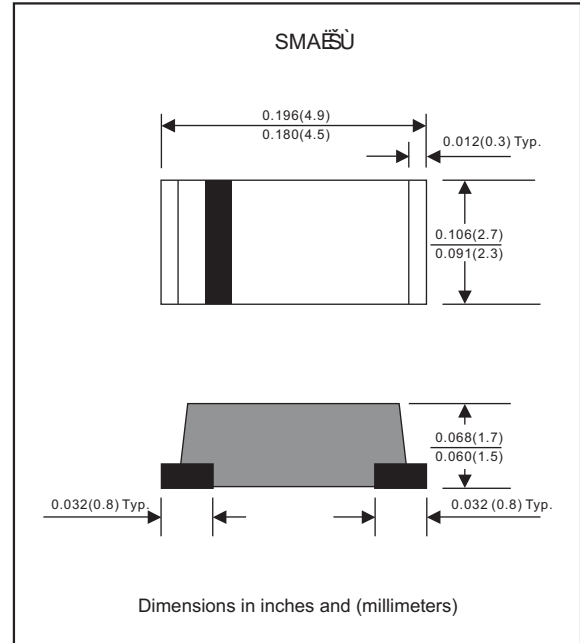
## Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- High current capability.
- High surge capability.
- Glass passivated chip junction.
- Moisture Sensitivity Level 1

## Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMA-LG
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.05 gram

## Package outline



## Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	$I_o$			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	$I_{FSM}$			50	A
Reverse current	$V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$	$I_R$			5.0	$\mu\text{A}$
	$V_R = V_{RRM} \quad T_J = 125^{\circ}\text{C}$				125	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	$C_J$		30		pF
Storage temperature		$T_{STG}$	-65		+175	$^{\circ}\text{C}$

SYMBOLS	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	Operating temperature $T_J, (^{\circ}\text{C})$
FM201LG	50	35	50	1.10	-55 to +150
FM202LG	100	70	100		
FM203LG	200	140	200		
FM204LG	400	280	400		
FM205LG	600	420	600		
FM206LG	800	560	800		
FM207LG	1000	700	1000		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ $I_F=2.0\text{A}$



#### Rating and characteristic curves (FM201 THRU FM207)

FIG.1-TYPICAL FORWARD

CHARACTERISTICS

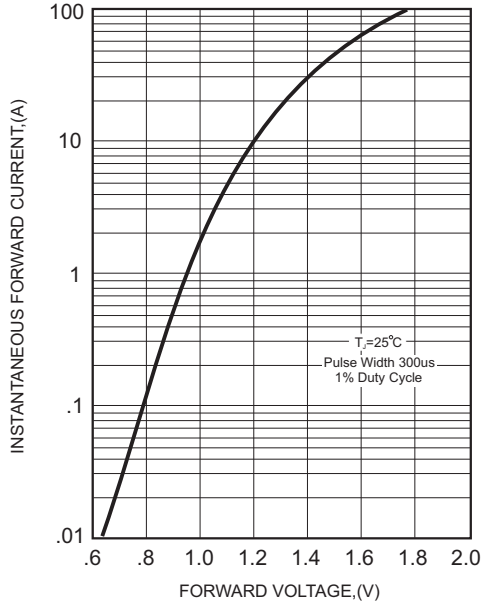


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

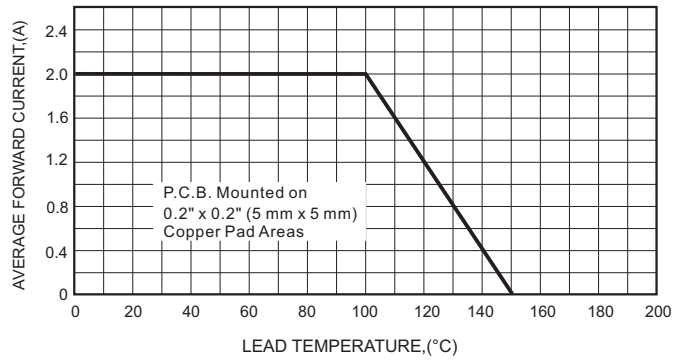


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

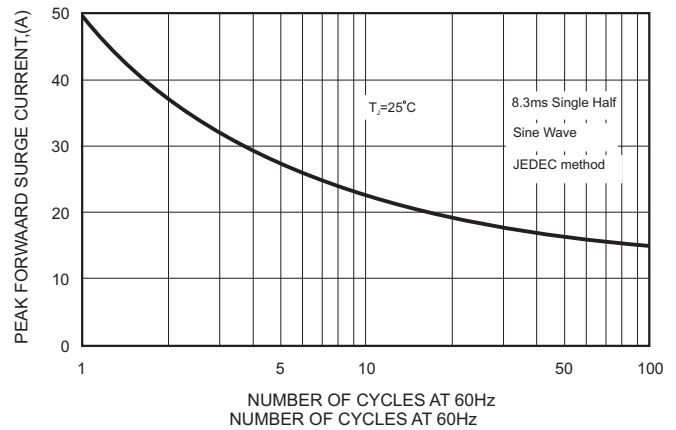


FIG.3 - TYPICAL REVERSE

CHARACTERISTICS

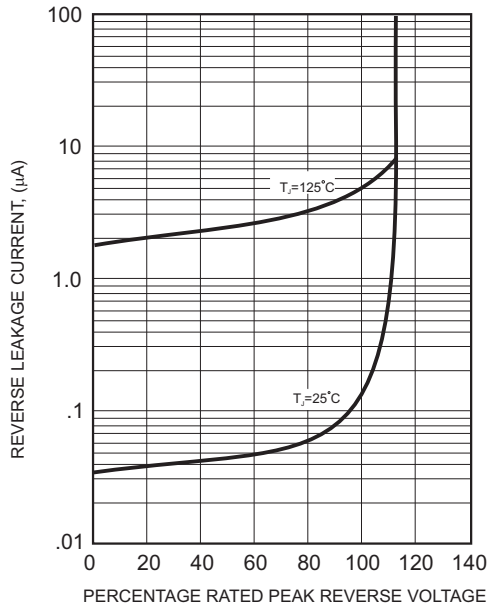
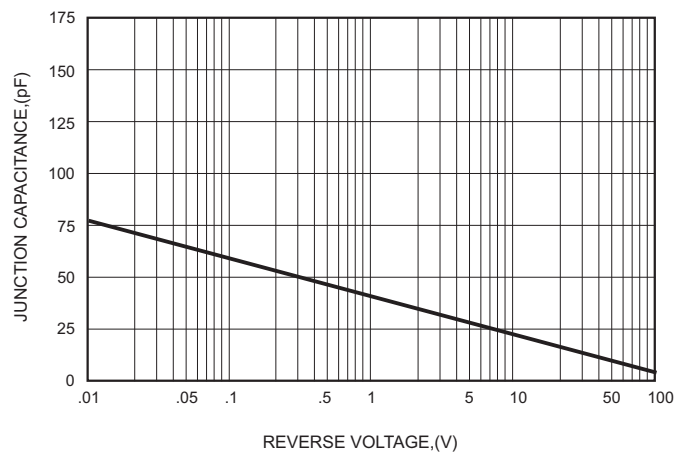


FIG.5-TYPICAL JUNCTION CAPACITANCE





### Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

### Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMA-LG	7"	2,000	4.0	20,000	183*170*183	178	382*356*387	160,000	16.0

### Marking

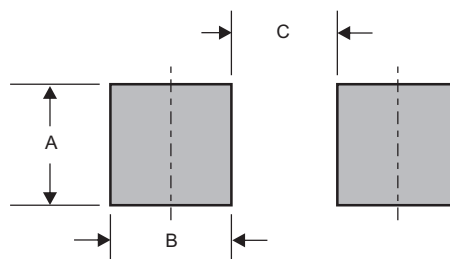
Type number	Marking code
FM201LG	A21
FM202LG	A22
FM203LG	A23
FM204LG	A24
FM205LG	A25
FM206LG	A26
FM207LG	A27

### Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

### Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMA-LG	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)



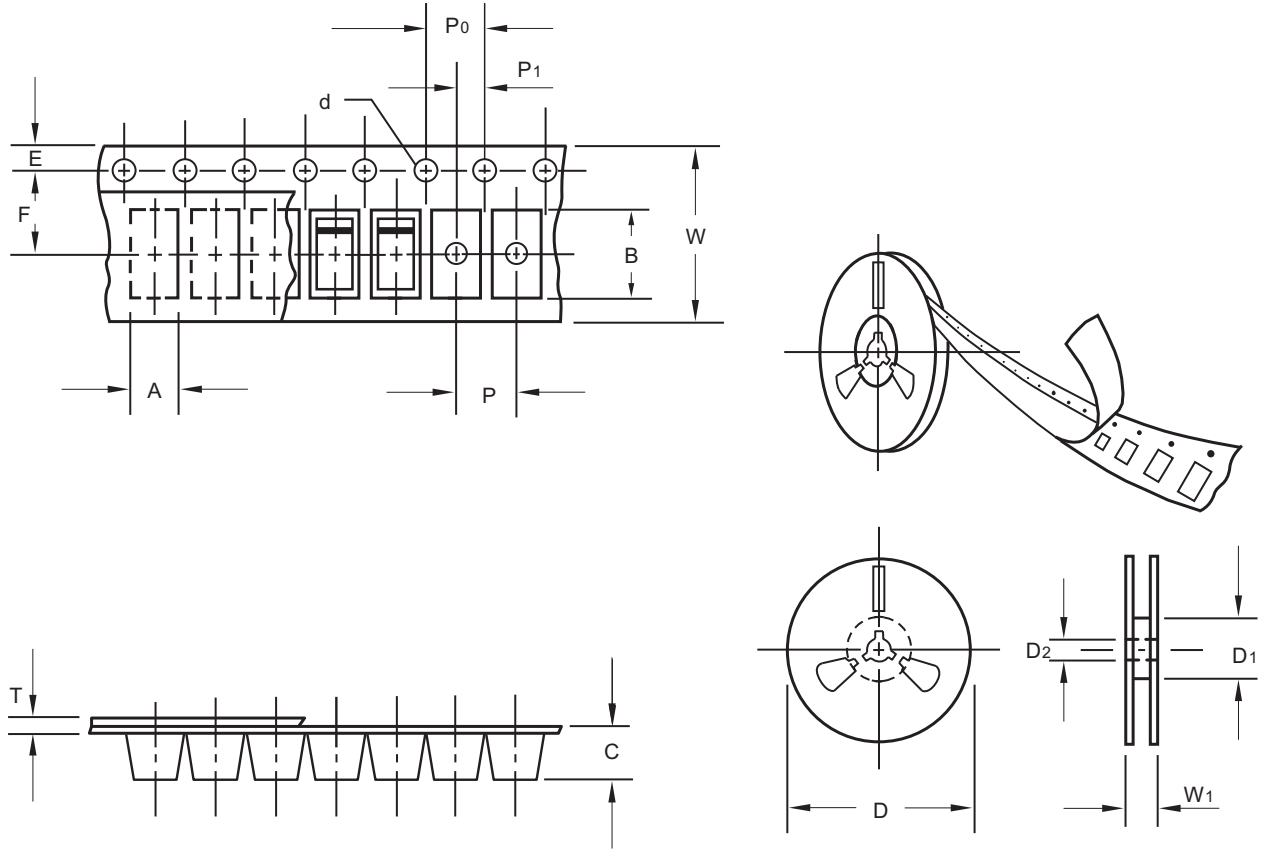
# WILLAS



**&0A GENERAL PURPOSE RECTIFIERS - 50V- 1000V  
SMA-LG PACKAGE**

**FM&0LG  
THRU  
FM&07LG**

## Packing information



unit:mm

Item	Symbol	Tolerance	SMA
Carrier width	A	0.1	2.80
Carrier length	B	0.1	5.00
Carrier depth	C	0.1	1.90
Sprocket hole	d	0.1	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D1	min	50.00
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D1	min	62.00
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.23
Tape width	W	0.3	12.00
Reel width	W1	1.0	18.00

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.